

ABSTRACT

A method and apparatus for controlling torque delivery independently, i.e., asymmetrically, to the two rear axles and wheels of a vehicle with front wheel drive provides improved vehicle handling and performance. The apparatus includes a prime mover, transaxle, power takeoff, rear axle having a pair of independently controllable modulating clutches driving respective rear axle and wheels, various vehicle sensors and a microprocessor. The method, embodied in software in the microprocessor, senses wheel speeds, yaw rate, lateral acceleration, throttle position and steering wheel angle, determines various reference values and oversteer and understeer conditions and activates one or both of the two clutches.